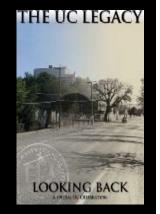
# NEWSLINE



**September 21, 2007** 

Vol. 32, No. 30

# What's **INSIDE**



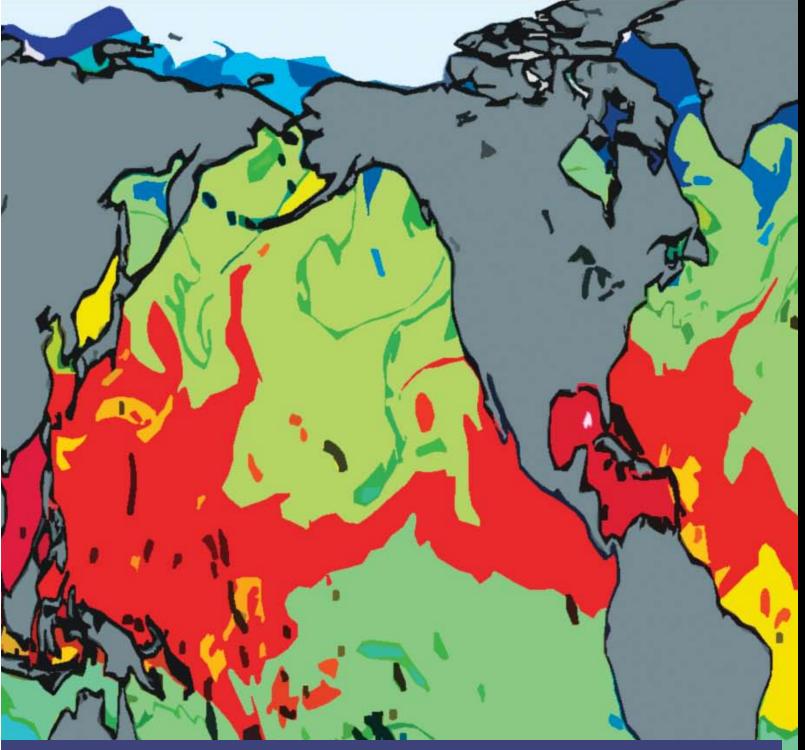
A TRIBUTE TO UC'S LAB LEGACY INSERT



Transition Post 9/17
Page 3



NIF FUTURE COMPUTES PAGE 5



human fingerprint

2 NEWSLINE September 21, 2007 September 21, 2007 NEWSLINE 3



## Regents vote to begin asset, liability transfer to LLNS, LLC

At their regularly scheduled meeting Thursday, the UC Board of Regents voted to provide authorization to the University of California to begin discussion with the Department of Energy/National Nuclear Security Administration regarding the transfer of assets and liabilities from the University of California Retirement Plan (UCRP) to the defined benefit plan (TCP 1) established by Lawrence Livermore National Security LLC (LLNS). The final transfer of funding from the UCRP to the LLNS Plan will not become effective until after UC has confirmed a final amount with DOE and until consultation with the UC Academic

Senate has occurred and the Regents have approved the transfer.

In addition, the Regents amended UCRP to ensure timely payment of benefits to or on behalf of eligible members of the LLNS plan who retire, die or become disabled before the final transfer of liabilities and assets. This amendment also extends to alternate payees of members of the LLNS Plan named in a qualified domestic relations order. The Regents action item can be found on-line at http://www. universityofcalifornia.edu/regents/regmeet/sept07/c11.pdf

## **Board of Governors will assess readiness of LLNS to manage Laboratory**

The Executive Committee of the Lawrence Livermore National Security, LLC (LLNS) Board of Governors will meet Tuesday to assess whether LLNS is ready to assume management of the Laboratory.

The meeting marks the first time the LLNS board will visit the Lab. The meeting also brings to a conclusion the readiness reviews that began earlier in Laboratory Oct. 1. the month. Lab Director George Miller, as president of LLNS, LLC, as well as Tom Gioconda and Pete Offringa, the LLNS transition team managers, and each of the Principal Associate Directorates, will present reports on the Lab's "readiness," along with plans for the future.

More transition news and reminders

- See page 8

From these reports the Executive Committee members will decide to issue an "approval to proceed" to readiness certification with the Livermore Site Office of the National Nuclear Security Administration.

The approvals are necessary for LLNS to begin management of the

The Executive Committee is made up of members from the LLNS, LLC partners and is the decision-making body of the Board of Governors.

> Members include, Gerald Parsky, board chairman; Tom Hash, vice chairman; Bruce Darling, William Fraser, Preston Rahe and Craig Weaver.

## **Hewitt Associates to administer Laboratory retiree benefits**

Lawrence Livermore National Security, LLC (LLNS) has announced its selection of Hewitt Associates, a global human resources services company, to assume health and welfare benefits administration services from the University of California Office of the President for Lawrence Livermore National Laboratory retirees.

Starting Nov.1, Hewitt will begin providing these services, including mid-year status changes, tracking overall Medicare eligibility, providing utilization data for future health insurance negotiations on behalf of LLNS, and managing annual open enrollment. Actual retiree benefits will not change for the remainder of 2007. Retirees will have the opportunity to re-evaluate their benefits for 2008 in December.

As part of the transition, the University of California will continue to collect retiree premiums and process Medicare Part B reimbursements through the December 2007 retiree pension checks. Starting in January 2008, retiree premiums may be mailed or direct deposited to Hewitt. Medicare Part B reimbursement checks will be sent to retirees

Most retirees will experience minimal changes as their benefits transition to Hewitt's system and its Website, Your Benefits Resources, Retirees will be provided with more information at www.ybr.com/benefits/llns. (Please note the Hewitt Website and Customer Service will not be operational until Nov. 1). To prepare retirees for these upcoming changes, University of California and Hewitt/LLNS have prepared upcoming mailings. Look for:

• An invitation to Town Hall meetings to explain changes to the payment process for retiree health care. The meetings will be held Oct. 30, 10 a.m. and 1 p.m., and Oct. 31, 10 a.m., at the Shrine Event Center, 170 Lindbergh Ave., Livermore (a tape of the presentation will be made available on the Laboratory Website, www.

• A magnet that reminds retirees of the new access channels for health care benefits beginning Nov. 1.

• Health coverage ID cards and new group policy numbers. Blue Cross ID cards will be mailed mid-November; temporary cards may be obtained online at www.bluecrossca.com. Health Net cards will go out in early November. PacifiCare cards will be mailed mid-October.

• A mailing from Hewitt announcing the health care annual enrollment process. Annual enrollment for retirees will be held Dec. 3-14. and will continue to access health and welfare benefits information currently available through:

• The Your Benefits Resources Website at www.ybr.com/benefits/llns —Beginning Nov. 1, the Website will be the primary resource for personalized benefits information. It provides information and online tools to help retirees make informed decisions during open enrollment and throughout the year. Prior to open enrollment, it is recommended that retirees visit the Website to set up their user ID and password and begin familiarizing themselves with the site features.

• Customer service representatives at 1-866-994-LLNS (5567) — Starting Nov. 1, customer service representatives will be available to provide assistance between 5 a.m. and 6 p.m., Monday through Friday. Calls made prior to Nov. 1 will receive a recorded message announcing this number is out of service.

LLNS is committed to providing retirees with access to tools and resources that can help manage health care needs throughout the year. LLNS encourages retirees to take the time to review the information received and attend a retiree meeting.

## Laboratory passes milestone in transition from UC to LLNS

September 17 marked an important milestone in our transition from the University of California to the Lawrence Livermore National Security, LLC. Approximately 99 percent of our current employees accepted their offer of employment, with 51 percent selecting TCP1 and 49 percent of the employees accepting TCP2.

I want to thank all of the individuals in both the LLNL and LLNS human resources offices who worked many long and hard hours to make sure employees had the information they needed to make their selection, and went to heroic lengths to ensure all employees, including those onsite, offsite and on leave, were aware of the deadline and given ample opportunities to make LLNS website at www.llnsllc.com. To help their selection.

With the offer letter acceptance deadline behind us, we turn our attention to the remaining nine days before we begin operating under the LLNS management and operation contract. My transition team is working closely with the LLNS transition team led by Tom Gioconda to make sure every detail necessary to assure a successful transition is achieved with minimal disruption to ongoing work.

Beginning Monday, employees will be able to select their 401(k) retirement and savings plans online at www.fidelity. com/atwork or by calling 1-800-343-8600. Written plan descriptions are available on the



A **MESSAGE TO EMPLOYEES** 

– Barbara Peterson

employees understand their options, Fidelity is holding a series of presentations at the Laboratory through Sept. 26. Please see the accompanying Newsline story for additional information.

The LLNS Transition Team is wrapping up the final details of transition to ensure the new management team is ready to assume operations on Oct. 1. On Sept. 25, the LLNS Executive Committee of the Board of Governors will be onsite to hear from our Director, George Miller, his principal associate directors and LLNS transition management on their assessment of readiness to assume operations. This "Readiness Review" will also be presented to

the Livermore Site Office on Sept. 26.

As part of transition, we also have made plans to celebrate our longstanding relationship with the University of California. On Sept. 25 we have a full day of celebratory events scheduled, including photomontage displays from each of our directorates, distinguished guest speakers and video presentations. In addition, a commemorative photo book has been compiled and is available to each employee. Please note that you must present your redemption card (sent to you through Lab mail) and your Laboratory badge to receive your book. I encourage all of you to attend this historic event.

On Sept. 28 all employees will receive their final paychecks from the University of California. Non-exempt employees will receive two paychecks, one for the pay period of Sept. 9-22 and one for the remaining eight days of the month, Sept. 23-30. Exempt employees will receive one paycheck for Sept. 1-30. Employees who chose vacation cash-out will receive an additional check.

It's been a long year — we've experienced much and we've achieved much. We have worked our way through this difficult time in our careers safely, securely and, most importantly, together. I look forward to continuing to work with all of you to complete the activities of the next few weeks.

#### Signups start for new LLNS 401(k) plans

Signups for the new 401(k) retirement and savings plans begin Monday, Sept. 24. The plans are being offered through Fidelity as part of the total compensation plans available under Lawrence Livermore National Security, LLC (LLNS). LLNS assumes management of the Laboratory on Oct. 1.

Employees may sign up online at www.fidelity.com/atwork or by calling 1-800-343-8600. The phone service is available Monday through Friday, 5 a.m. to 9 p.m.

Non-exempt or hourly paid employees who wish to have deductions taken from their first LLNS paycheck must sign up by 1 p.m. (PST) Oct. 3. Exempt or salaried employees must sign up by 1 p.m. (PST) Oct. 12 to have deductions taken from their first check. Those employees who do not wish to have deductions taken from their first LLNS paycheck may enroll in the 401(k) plans at any time.

Fidelity currently is holding a series of presentations designed to inform employees of the new 401(k) investment options and contribution limits. Fidelity also will review distribution, rollover and loan provision rules in the plan.

The presentations continue through Sept. 26 (see accompanying chart). Employees who wish to attend need not register in advance.

Fidelity will have counselors available on site for individual appointments throughout the day on each of these dates. Appointments for individual counseling sessions may be scheduled by calling Fidelity at 1-800-642-7131.

#### **Upcoming LLNL 401(k) presentations**

Date	Time	Location
Monday, Sept. 24	9–10 a.m.	Bldg. 123 auditorium
	Noon –1 p.m.	Bldg. 543, room 1000
	3–4 p.m.	Bldg. 123 auditorium
Tuesday, Sept. 25	9–10 a.m.	Bldg. 361, room 1140
	1–2 p.m.	Bldg. 361, room 1140
	4–5 p.m.	Bldg 361, room 1140
Wednesday, Sept. 26	8:30-9:30 a.m.	Bldg. 543, room 1000
	1–2 p.m.	Bldg. 543, room 1000
	3:30 p.m.	Site 300, fire station



Lisa Poyneer, center, reviews information given out at Wednesday's LLNL 401(k) plan presentation. Presentations continue next week to brief employees on how to sign up for new LLNS 401(k) accounts.

PLACES **PROCESSES**  4 NEWSLINE September 21, 2007 September 21, 2007 NEWSLINE 5

## SCIENCE NEWS

## Increase in atmospheric moisture tied to human activities

By Anne M. Stark Newsline staff writer

Observations and climate model results confirm that human-induced warming of the planet is having a pronounced effect on the atmosphere's total moisture content

Those are the findings of a new study appearing in the Sept. 17 online edition of the Proceedings of the National Academy of Sciences.

"When you heat the planet, you increase the ability of the atmosphere to hold moisture," said Benjamin Santer, lead author from the Laboratory's Program for Climate Modeling and Intercomparison. "The atmosphere's water vapor content has increased by about 0.41 kilograms per cubic meter (kg/m²) per decade since 1988, and natural variability in climate just can't explain this moisture change. The most plausible explanation is that it's due to the humancaused increase in greenhouse gases."

More water vapor — which is itself a greenhouse gas — amplifies the warming effect of increased atmospheric levels of carbon dioxide. This is what scientists call "positive feedback."

Using 22 different computer models of the climate system and measurements from the satellite-based Special Sensor Microwave Imager (SSM/I), atmospheric scientists from LLNL and eight other international research centers have shown that the recent increase in moisture content over the bulk of the world's oceans is not due to solar forcing or gradual recovery from the 1991 eruption of Mount Pinatubo. The primary driver of this "atmospheric moistening" is the increase in carbon dioxide caused by the burning of fossil fuels.

"This is the first identification of a human fingerprint on the amount of water vapor in the atmosphere," Santer said.

"Fingerprint" studies seek to identify the causes of recent climate change and involve rigorous comparisons of modeled and observed climate change patterns. To date, most fingerprint studies have focused on temperature changes at the Earth's surface, in the free atmosphere, or in the oceans, or have considered variables whose behavior is directly related to changes in atmospheric temperature.

The water vapor feedback mechanism works in the following way: as the atmosphere warms due to human-caused increases in green house gases, other green house gases caused by human activity include water vapor increases, trapping more heat in the atmosphere, which in turn causes a further increase in water vapor.

Basic theory, observations and climate model results all show that the increase in water vapor is roughly 6 percent to 7.5 percent per degree Celsius warming of the lower atmosphere.

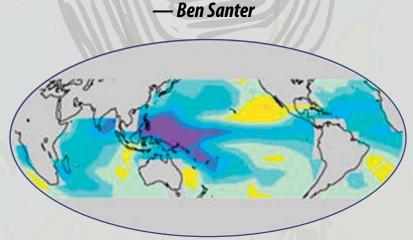
The authors note that their findings, when taken together with similar studies of continental-scale river runoff, zonal-mean rainfall, and surface specific humidity, point toward an emerging human-caused signal in the cycling of moisture between the atmosphere, land and

"This new work shows that the climate system is telling us a consistent story," Santer said. "The observed changes in temperature, moisture, and atmospheric circulation fit together in an internally and physically consistent way."

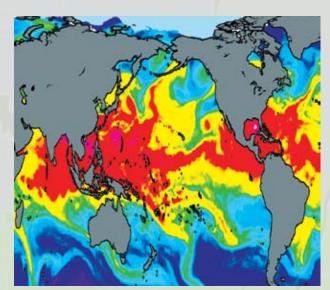
The Livermore authors include Karl Taylor, Peter Gleckler, Jim Boyle and Stephen Klein.

Other scientists contributing to this research are Carl Mears and Frank Wentz at Remote Sensing Systems in Santa Rosa; Tom Wigley, Jerry Meehl, and Warren Washington at the National Center for Atmospheric Research in Boulder; Tim Barnett and Dave Pierce at Scripps Institution of Oceanography in La Jolla; Wolfgang Brüggemann at the University of Hamburg in Germany; Nathan Gillett at the University of East Anglia, and Peter Stott at the Hadley Centre for Climate Prediction and Research (both in the U.K.); Toru Nozawa at the National Institute for Environmental Studies in Japan; and Mike Wehner at Lawrence Berkeley National Laboratory.

## "This is the first identification of a human of water vapor in the atmosphere."



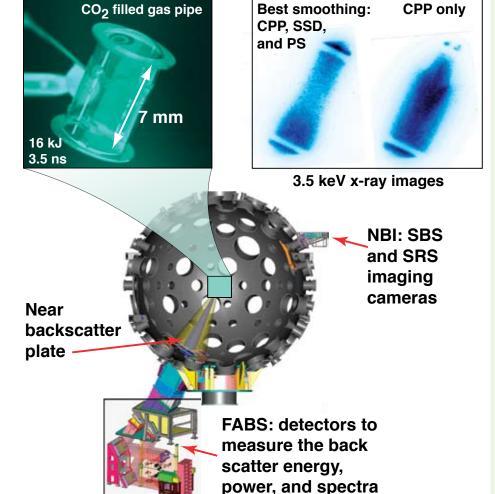
Observed pattern of changes in water vapor between 1988 and 2006. The observed increase in atmospheric moisture since 1988 could not be explained by natural factors alone, and the authors say it was primarily due to human-caused increases in greenhouse gas emissions.



CARL MEARS AND FRANK WENTZ/REMOTE SENSING SYSTEMS

On the cover: August 28 estimates of the amount of atmospheric water vapor over oceans from the satellite-based Special Sensor Microwave Imager. Locations with high atmospheric moisture content are denoted by red and white colors. The highest water vapor values are associated with typhoons Talim and Nabi in the Pacific and with Hurricane Katrina in the Gulf of Mexico.

# fingerprint on the amount



This schematic diagram shows the laser beam propagation experiment. Images at the upper right show the X-ray emission of the plasma. When all three beam-smoothing methods were used, there was full propagation of the beam. When only one smoothing method was used (continuous phase plates, or CPP), the beam stalled before propagating all the way to the target.

### SCIENCE NEWS

## Simulations of early experiments show laser project is on track

By Nancy Garcia Newsline staff writer

The National Ignition Facility's Early Light campaign in 2003-2004 included four shots using four laser beams at high energy on a full-scale target for the first time. The resulting data has enabled unprecedented computer simulations, so closely matched to experimental results that the achievement has been published in the prestigious journal Nature Physics.

"Getting agreement on that scale is really something new," said principal investigator Siegfried Glenzer. "You have to resolve microscale phenomena over previously inaccessible space, volume and time scales."

The paper indicates that NIF's laser beams will propagate effectively in plasma-filled targets designed to produce the world's first demonstration of inertial confinement fusion.

The paper examines two sets of conditions. In one set, an unsmoothed laser beam entered the target and stalled when the hot plasma in the target rippled and clumped, causing about 30 percent of the light to backscatter and fail to reach the target center. Plasma physics theory had anticipated a lack of uniformity, or nonlinearity, as the plasma was heated, Glenzer said. The challenge was to accurately predict the amount.

"Nonlinearity was suspected, but we couldn't quantify it," he said.

Then in another experiment, using NIF's three beam-smoothing capabilities simultaneously, the laser was able to fully propagate through a seven-millimeter tube of carbon dioxide. Effective laser beam propagation through dense plasma will be required for NIF to ignite a sustained fusion reaction.

"Now we are going to close the loop and use the tools to design the next set of experiments," Glenzer said. Experiments next summer will use 96 beams focused on a gold hohlraum (the eraser-sized capsule containing the fusion target) filled with a lighter gas mixture to help select the optimum target

radiation temperature for ignition experiments. The researchers hope to hold backscattering to less than 15 percent. "We will look at symmetry and shock timing and all of the physics

questions we need to answer for ignition," Glenzer said. "We hope the 2008 experiments will lead us down the path to full-scale ignition.'

In ignition, plasma – a turbulent soup of ions and free electrons – is compressed and heated by the shock waves created by intense laser beams that deliver 1.8 million joules of energy in a pulse lasting about 10 nanoseconds

(billionths of a second). This energy is equivalent to 1,000 times the electrical generating power of the United States in the same brief time period. The lasers will trigger a controlled laboratory fusion reaction that will yield more energy than is required to start the thermonuclear burn.

Inertial confinement fusion experiments will create conditions similar to those inside an exploding thermonuclear weapon or in the cores of stars and giant planets. The resulting information will be used to help ensure the reliability and safety of the nation's nuclear stockpile without underground testing. The

First experiments and unprecedented computer simulations show laser fusion plans are on track at the National Ignition **Facility** 

data also will reveal new details about the nature and structure of the universe. When completed in 2009, NIF will focus 192 lasers on a millimeter-sized target filled with deuterium and tritium, two isotopes of hydrogen. Full-scale shots will produce extremely hot, dense physical regimes never before seen in a laboratory setting.

Laurent Divol oversaw the computation effort reported in the Sept. 2 online edition of *Nature Physics*. The simulation tracked 3.5 nanoseconds of beam pulse, more than 1,000 times longer than the typically short 100 picoseconds (trillionths of a second) usually modeled with the laser-plasma code pF3D. The code was originally developed in AX Division of the Defense and Nuclear Technologies Directorate.

Because the beam being modeled is cylindrical, the team took advantage of the symmetry and modeled aspects in two dimensions. The researchers simulated how the target evolves with time as well as the geometry of the beam propagation, revealing details down to the wavelength scale (a few hundred nanometers, or billionths of a meter).

Milo Dorr of the Computation Directorate's Center for Applied Scientific Computing led the code modification effort. Dorr said even one beam is difficult to simulate at the wavelength scale because it is thousands of wavelengths wide. That fine-grain simulation was combined with a threedimensional view of the plasma heating, modeled on a coarse grid, which is much faster to compute. Computing each aspect still took a few weeks of time on a few hundred central processing units.

Next summer's 96-beam experiments are called "Eos," for the goddess of dawn. They are meant to determine the right radiative temperature to be reached in the hohlraum for ignition. The team is doing some simulations now, examining three dimensions for 100 picoseconds. The simulations are primarily being run on about 10,000 nodes of LLNL's Atlas supercomputer.

"It's a very nice marriage between some of the best capabilities the Lab has," Glenzer said, "namely the NIF super laser and the Lab's supercomputers."

Simulations are a key research tool that bridge theory and experiment, providing a forecasting shortcut to predict what may occur and refine and optimize experimental design.

Divol summed up the hope and satisfaction such results represent, saying that after spending 15 years to develop NIF, researchers are excited to approach discovering, over the next few years, whether ignition will be achieved. "This was showing we can simulate it and it works," he said of the *Nature* paper. "It worked quite well."

6 NEWSLINE September 21, 2007 September 21, 2007 NEWSLINE 7

#### i.want ads

Due to the high quantity of ads and space limitations, these want ads have been abbreviated. For the complete ad listings, refer to the internal Website: http://www-r.linl.gov/pao/news/ wantads.html or for the latest pdf download and retiree information, see the external Website: http://www.linl.gov/pao/employee/. Please note that these ads appear on the Web. Date of ads: Approx. Sept. 11 to Sept. 18. Ads appear on the Web for seven days.

1930 Ford model. \$11,500. Great condition. 209-599-8523

1948 Ford Club Coupe. \$15,000. Original and in

1957 Chevy Belair \$20,000 Red custom paint near-show condition. Original 283, 4-door, 3 speed. New sound system. 209-402-5339

1974 BMW 2002. \$3,800. One owner, driver. Car runs, no rust, manual trans., dark blue. 508-

1987 Volvo 240DL wagon. \$1,500. Less than

1991 Fleetwood Flair 25-ft, class A motorhome

1993 Ford Explorer. \$2,000. 178,000 miles, XLT model, four-door, 4x4, cruise control, 925-292-

1994 Mercedes E320 wagon. \$6,700. Black with tan interior, 148K miles, 7 passenger, ex. cond. 209-943-2166

1998 Audi A4 Avant wagon. \$6,500 obo. Great car

1999 Miata. \$7,500. Auto w/overdrive, dual airbags,

2000 VW Passat GLS. \$6,900. 4 dr, V6, loaded, gray, 95K miles, Tiptronic auto trans, new brakes. 209-

2002 Toyota Tacoma truck. \$10,000. With bed liner. 55,000 orig. miles. Extended warranty. 925-

2002 VW Jetta 1.8 T GLS. \$11,111. Navy blue ndition, air, cruise, 58K miles. 510-548-

2003 Mazda Protege. \$7,000. 59K miles, 5 spd manual trans, PS, PB, AC, AWFWCD, 925-443-1074

2003 VW letta \$14,000, 34K miles, new tires & battery, blue, leather interior. Exc. cond. 925-456-

2004 Ford Taurus. \$8,000. SES. 44K miles, good cond. V6 A/T, power windows, seats 6. 925-294-

2004 Mini Cooper. Yellow/black. \$14,900. 4-Cyl. 1.6 liter, black bonnet stripes, ~62,000 miles, 925-980-9462 or 925-901-0612

2004 Toyota Corolla \$10,500 Sedan 4D white

2006 Black WRX turbo AWD, tuned. \$25,999. Just

1995 Volvo 850 GLT. \$2,500. 100K miles, 5-spd

manual, leather, CD changer, air, 925-283-9525

5,000 miles. Fully loaded . 925-461-2908 1959 Ford Fairlane. \$1,000. 4 dr, good, straight Scandinavian Design. \$60 obo. 925-449-1957

1990 Donzi Blackwidow. \$17,000 obo. 24-ft., fuel-injected, 454 gps chartplotter, vhf radio, elec. compass, 925-525-9283

1997 Yamaha Waverunner GP760 & trailer w/ utility box. \$3,350. Low hours. 925-424-3670

21 foot 2001 Calabria. \$23,000 like new. 125 hours, 11 speakers 2 amps and AM & FM cd player Pro

Mirror. \$15. 2' by 3' mirror with a gold frame. 925-

Oak captain's bed. \$300. 6 drawers and matching

Office desk. \$75 obo. Large black metal executive

Queen bedspread. \$25. Light blue and pink. Like

Queen size IKEA loft bed. \$150. White metal frame with navy blue fabric, 510-540-7343

Reebok jogging stroller. \$75. Adjustable canopy,

Rolling file drawers. \$35. 925-640-5469

Small touch lamp. \$5. 925-640-5469 Garrard GT 55 turntable, \$100, Good condition, has Sofa and love seat, \$150, Levitz Scandinavian

HP 5550 printer. \$40. Like new color deskjet printer,

Nikon green laser pointer. New in box. High quality, bright beam. \$100. 925-455-4484

Palm Zire 21 handheld. \$35. Date book, address book, note pad, 925-846-3653

Computer items. Desktop tower computers. Hard disks removed before giving. Also, keyboard, software, CDs, DVDs, books, more. 925-449-1957

Electric dryer. Working condition, free to good home. Pick-up or will deliver locally in Livermore. 925-443-2827

Garden fountain. Medium-sized cascade-style garden fountain: needs pump, 925-447-2687

Solar pool heater 7 heat exchanger panels for in

#### HOUSEHOLD

Aluminum ladder. \$80. Keller Heavy Duty (Type 1) onvertible aluminum folding multiladder. 925-

Beautiful solid wood ladder shelves. 925-640-5469 Bunk beds. \$300. Maple with mattresses, ladder and

under bed storage drawers. 925-447-1954 Cal king mattress, \$175 obo, Serta Grand Sonata and. Only used 1 year. 925-443-8354

China cabinet. \$250.Top has light and glass doors. Bottom has glass end doors. 925-447-1954

Computer desk. \$190 obo. Tower, American-made

oak, w/2 drawers + file drawer, 925-447-7082 Computer desk \$25 Holds a 20" convention: monitor with plenty of space/strength. 510-653-1017

Computer desk with hutch, chair. \$75 obo. One computer desk with hutch. 925-449-1957

Craftsman work bench, \$250 obo, Measures 54" W/34 "H/20 "D. Sturdy steel construction. 925-

Desk and hutch. Great for student. \$25, 925-634-

DUTAILIER glider rocker and ottoman. Set \$100.

Entertainment center. \$500. Oak, very good condition. 11.5' long 23" deep and ~7' tall. 925-

Flagstone from Montana. \$125. 1/2 ton. Will cove an area of 60 square feet. 925-455-1048

\$100. Like new, kept in spare room, 209-607-3661

Furniture: Sofa bed & love seat from Levitz. oak trimmed, durable/washable, \$175 obo. Also, breakfast teakwood dinette set from the

Glass fixtures for ceiling fan lights. \$60. 925-964

#### Hose reel cart. \$15. 510-653-1017

Ikea Tromso loft bed, tall model. \$75. 209-848-3421 Kenmore upright freezer. \$150. 11.7 cu ft Sears. 7

years old, excellent condition. 209-239-8984

Ladder. \$25. Keller 8' aluminium model 928, 225 lb

Microwave oven. \$100 obo. Tappan speed wave 1000 watt. 925-200-2543

refinishing, 846-8394

2000 Honda dirtbike. \$1,500 obo. 5 speed manual-shift gearbox, 4 stroke w/ green sticker. 209-495-695

2006 Ducati 999 superbike. \$12,000. bi-posto red. In excellent shape with 3300 miles. 209-495-

empurpedic-type pillowtop. \$100. For California

Weber Genesis 1000 grill, \$100, OEM burners and

3 Disneyland 2-day, park-hopper tickets. \$300.

Stereo cabinet. \$50. TV stand with shelving & pull-

Aluminum ladder, \$80, 925-447-1954

design, oak trim, 925-449-1957

Baby items. Blankets/lap pads, sheets, infant boy clothing, size 0-6 months. 925-413-2595

BMW parts. \$800. Parts for 325 series. Engine/5 speed, MoMo wheels, interior parts, etc. 209-943-

Car seat. \$20. Britex, blue denim. 925-422-0865

Child seat for bicycle. \$10. Bolt on child seat front

Christmas decor. 925-640-5469 Christmas tree stand, \$15, Swivel straight, easy to

Coach purse. \$150. Wristlet and coin purse also. 209-612-8525

Entertainment book fundraiser. \$25.Proceeds for Livermore American Indian Center, 925-709-1794 Firewood \$50 per truck load Seasoned almond/

wood for sale, you haul. 209-599-3600 Fun with Dick and Jane DVD. \$4, 925-876-5188

Garden arbor. \$10. Green arched light-weight metal; used once for party decoration, 925-447-268;

Giants ticket. \$15. For Friday, Sept. 21, vs. Cin.

Graco Baby gear. \$100.obo. "Ivy League" trave system with matching high chair. 209-858-5648 Halloween costume, \$5, Stewardess costume, never

worn size 10 or smaller 925-640-5469

Jeep bumper. \$25. Black double tube with recv. for 1987-06 Jeep Wrangler. 209-239-3833

Jewelry organizers. \$36. 5 of these, stackable, clear

Kolcraft Cuddle n Care Bassinet, \$30. Has a mobile

Ladders. Used 12' 3-legged wooden picking or pruning ladders in good condition. \$20.00 each. 209-892-6993

Ladies diamond ring and amethyst ring, \$100 obo Ladies 14K gold, heart-shaped. \$80 obo. 510-

Oak firewood. \$160. Cut rounds, U-haul, U-split,

Plants. \$100. Pair of Italian Cypress trees, 925-447-

Ruby & diamond ring. \$300 obo. 925-876-5188 Small aquarium. \$10. This is a cute little aquarium

Spiderman giant inflatable pool. \$25, 925-648-0671

Swimming pool \$1,000, 15x25x4' deep, above ground, excellent condition, 7 yrs old. 925-443-1673

Freadmill, \$275, Brand new, used maybe 15 times. Has 2 year warranty left. Folds up. 209-612-8525 Wedding apparel. Size 12, slip designed to fit under an A-line wedding dress. 925-447-2687

Youth school desk/chair. \$20. Antique, could use

#### MOTORCYCLES

1979 Honda Odyssey: ATV \$1,700. FL-250, really good condition. 925-449-8020

2004 Yamaha R6 limited edition. \$6,800. Silver

Custom Harley Sport, \$9,000, Custom flame paint

Motorcycle. \$100 obo. 175cc (?); built from electrical system incomplete; never run. 925-443-3511

Motorcycle, \$450, 1888 Kawasaki 305 LTD.

#### Motorcycle seat. \$200. fits Harley 1936 to present

MUSICAL INSTRUMENTS Artley Flute. \$500. 5-0, open hole, B foot, silver plated flute. Good for intermediate student. 925-922-4776

Gemeinhardt flute, \$1,000, KS Special, gold lig plate, open hole, B foot, with high C gizmo, 925-922-4776

Piano. \$2,200. 1903 Chickering. Recently serviced and tuned. Plays and sounds beautiful. 925-634-

9973 Piano. \$800. Yamaha spinet, compact & rare

Upright piano. \$600. Aldrich studio upright, early 1900s, oak, good condition. 925-455-4440

Alfalfa grass horse hay. \$11/bale. Third-cut, excellent quality, alfalfa-grass hay (50/50). Near the Lab. 925-443-1547 Electronic in-ground pet fence, \$169, Innotek. never used, with 1,000 (2 spools) of wire and surge

surpressor. 925-785-4680

Free, adorable kittens. Very friendly, 6-week old kittens. Box trained and ready to go, White & tabby w/green, yellow & brown eyes. 209-304-3775

Free kittens, About 3 months old, various colors male and female, outdoors but can be box trained. Manteca. 209-239-5730

## Puppies .\$500-\$550. BLK/YLW Lab puppies born 8-30-07. 209-825-0267

RECREATION EQUIPMENT Ab Mouse exerciser. \$10. 925-640-5469

Oldie treadmill. \$30, 925-640-5469

Roller blades, \$100 obo, Two pairs, Storage bag knee pads and wrist guards included. Mens size 11 and women size 10. 209-612-8874

Roller blades. \$5. Women's size 8, recreational quality but serve the purpose for beginners. 846-

Ski package \$200 Downhill skis + poles + boots used and in great shape. 925-200-2543

Titleist Driver 907D2 9.5. \$325. w/UST Proforce

Youth baseball glove. \$10. Mizuno leather youth for left-hander. 846-8394 RIDESHARING Montclair vanpool \$145 Leaves school at 7 Pick-

up at Joaquin Miller 7:05 a.m. Arrives LLNL at 7:45 a.m. Leaves LLNL 5:30 p.m. 510-531-4399 Montclair/Oakland vanpool. \$160. Van leaves Montclair at 7. Second stop at Joaquin Miller 7:05.

Departs lab at 5:30. 925-424-6215 Vanpool . Modesto vanpool has a couple of openings. Leaves from Home Depot at 6:35 a.m. and leaves Lab at 4:45 p.m. 8:00-4:45 work schedule, 209-576-0217

#### SHARED HOUSIN Furnished room for rent. Tracy. \$500/mo. This room

is equipped with TV, DVD, internet access, bed, dresser, computer, desk and chair. 925-337-3789 Room for rent, \$600, Looking for a male roomm

to share a 2-bedroom apt. 5 min. from LLNL off of East Ave. (Ironwood apts). 707-254-5120 Room for rent. \$500. Large room with private bath near Tracy Mall. Male, non-smoker preferred. No pets. 209-612-2840

Room for rent. \$650. Furnished room available in large house 2 miles from LLNL. 925-454-9224 Room for rent -Tracy, \$700, Private bath, access to kitchen, laundry, family room, 1 car in garage s 2900 sq. ft. 209-815-6962

Roommate(s) wanted for a 3BR townhouse/home

Rooms for rent .\$600 to \$900. New home located in Manteca. Several rooms now available. 925-525-4587

2005 10X5 all-steel utility trailer. \$850. 10X5 PJ. Slightly used, excellent condition. 3,500 lb. G.V.W.R., 2" ball coupler, safety chains. (209)

5th wheel trailer \$2,800, 1986 Komfort Lite new

Desert Fox. \$18,500. 2004 21SW Toy Hauler. All options, Onan generator, fuel station. Excellent cond. Stored inside. 925-516-8339

1998 Dodge Ram 1500 Quadcab 4X4. \$9,800/

2004 Blk Nissan Frontier King Cab truck. \$13,800. Well maintained, 42,000 miles, incls. 60,000 factory warranty. 925-640-9285 or 925-449-4329

Chevy Silverado 2006 truck. Best offer. 3/4 ton, crew cab, short bed, 8.11 gas engine, 4-whee drive, fully loaded interior. 925-634-5851

Cabin in Long Barn, CA. \$150. Nice little getaway Pinecrest, CA. 1BR/1BA with a loft that sleeps eight

Heavenly ski vacation \$950/week Dec 15-22 2007. 2BR/2BA condo, full kitchen, magnificent views. Sleeps 6. Walk to ski lift or use free shuttle

Kona Hawaii vacation home. Spacious, secluded

 fully furnished home in Kihei. Exchange wit similar home in Livermore area. 925-443-8354 Maui HI Kahana Reef oceanfront, 1BR/1BA

So. Lake Tahoe vacation Rental. \$700/wk .Sleeps comfortably. Pets welcome. Three blocks from Tahoe Oueen & lake, 925-556-9511

furnished, newly remodeled kitchen, comfortable, all amenities. 209-599-4644 Tahoe-Donner cabin ski lease, \$1,700, 3BR/2BA

Truckee mountain home. Close to all N. Lake Tahoe/Truckee activities, 3BR-2Bath, sleeps 8-10garage + long driveway, 3 decks + hot tub. 925-784-0245

Wine country rental. \$150/night Monte Rio. 925-513-4767

49er vs. Tampa Bay tckets. Face Value. Game on

Aircraft for restoration, dismantled or in box. 408-

want 49ers vs. Ravens Tix. Looking for 2 or 3 tickets to the 10/27 49ers game against Baltimore

Seeking used treadmill. Seeking used (but working) readmill w/ bookrest, suitable for running. Wi rent or buy for reasonable price. 925-449-4669

Sharks tickets. Looking for tickets (2) to Sharks

\$700-800/mo. 703-622-3727

seats and carpets, good condition, good tires, w/hitch. 209-982-1035

engine, 925-443-7729 Forklift, \$6,000, 1997 Caterpiller, 5000 lb lift, 15 ft

san Xterra XE. \$8.500. 4X4 AT AC tow package

#### extras 166.880 miles, \$8500, (925) 443-4639

VACATION RENTALS

MAUI - house exchange. Live on Maui for a year

South Lake Tahoe chalet. 3BR, 2BA, nicely

Drummer. Big Band needs drummer, 17 piece wing band, Wednesday night rehearsals ivermore, twice monthly. 915-422-9709

section UR5 rows 17 or 18 to sit with friends.

Agreement paves way to degree

Chris Cross receives his Ph.D. hood from Department Chair James Luscombe and LLNL Chair Professor Craig Smith

By David Schwoegler Newsline staff writer

The ink was barely dry on the 2004 Memorandum of Understanding (MOU) between the Lab and the Naval Postgraduate School (NPS). That's when NPS physics student Lt. Col. Christopher Cross began his Ph.D. research supporting the Laboratory's efforts simulating and analyzing nuclear weapons effects.

During the next three years, Cross worked closely with researchers in AX Division. Their goal was to enhance the ability to analyze and understand the full range of phenomena — from near-field to far-field — relevant to the impacts of a high-altitude detonation of a nuclear device. Cross split his study time between Livermore and Monterey, spending a year during this period at Livermore.

Working under the direction of LLNL Chair Professor Craig Smith along with Defense and Nuclear Technologies Directorate (DNT) researchers Dennis Hewett and Tom Thomson, Cross performed research critical to the AX Division mission, while fulfilling his academic and research requirements for his physics doctorate. The title of his dissertation is "Computational Modeling of the Spatial Distribution and Temporal Decay of Geomagnetically Trapped Debris of a High Altitude Nuclear

Detonation. Cross's close work with Livermore researchers during his post graduate work resulted in immediate inclusion of his findings in Laboratory programs. His results are having a significant impact on modeling efforts within AX Division.

Having successfully completed his research and academic requirements at NPS, Cross joined the faculty as the Advanced Physics program director at the U.S. Military Academy at West Point, where he teaches and directs the upper-division physics curriculum As a West Point faculty member, Cross continues technical

interactions with the Laboratory. He expects to return to

Livermore for summer research projects. And following

interactions remain active.

completion of his West Point obligations, he may return to Livermore for a long-term assignment. The NPS-LLNL collaboration represented in Cross's research is one of many ongoing student-faculty interactions between the two institutions. Several master's degree students are currently pursuing research projects supporting LLNL missions, and a number of other faculty and research staff

The Laboratory and the U.S. Naval Postgraduate School in Monterey have worked together since 1998 in a series of exchanges and collaborations focused on mutual national security research. In 2004, these interactions were formalized in a MOU detailing their cooperative science and technology

### PEOPLE NEWS

## Officials urge West Nile Virus precautions

The Alameda County Mosquito Abatement District picked up a dead American crow from LLNL's main site earlier this month, tested it in-house and

found it positive for West Nile Virus (WNV). It is unknown whether this crow flew to LLNL property already diseased (infected

elsewhere) or became infected onsite. This event serves as a reminder to Laboratory employees to protect themselves from mosquito bites, since transmission of this disease to humans occurs through mosquito bites. While most individuals infected with the virus are asymptomatic or have mild disease, it can cause severe encephalitis (brain inflammation) in a small

percentage of people. Although the WNV season started later and slower this year compared to the past few years, a cluster of birds testing positive for the virus is beginning to emerge in Livermore (five birds). This represents about half of positive birds in Alameda County thus far this year (nine birds). However, this cluster is not unusual for Livermore and, in addition, no mosquito pools of water tested positive — with more than 200 tested this year. Mosquito pools are groups of 50 or more mosquitoes tested for the presence of the virus.

Over the past couple of years, Alameda County had over 40 WNV-positive birds, with 85 percent of these in the Tri-Valley area. All three adjacent counties experience a much higher rate of WNV activity than Alameda County. Despite this lower rate of activity in Alameda County, Laboratory employees should take the following precautions:

• Dawn and dusk: Avoid spending time outside when mosquitoes are most active at dawn and dusk. The type of mosquito that carries WNV and bites outdoors is especially active at dusk.

• DEET: Apply insect repellent

bite indoors.

containing DEET or Picaridin

according to label instructions,

especially if you're active outside at dawn or dusk. • Door and window screens: Repair or replace screens that have tears or holes. This places a barrier for the type of mosquito that may carry WNV and

• Dress appropriately: When outdoors,

wear long pants and long-sleeved

- shirts (you can now buy clothing with insect repellent built into the fabric).
- Drain: All sources of standing water that can support mosquito breeding should be drained; don't over water

vour lawn. Most people who become infected with WNV do not experience symptoms or become ill. Only about one out every 150 people infected with WNV may develop a more severe form of the illness. Adults over 50 years old and people with weakened immune systems are at increased risk of serious complications from WNV infection. Anyone who develops symptoms such as a high fever, confusion, muscle weakness, severe headaches or stiff neck should seek

medical care immediately. As part of an ongoing surveillance program, the Alameda County Mosquito Abatement District is asking the public to report any swimming pools in their neighborhood that are not actively maintained. With the slower real estate market, this is an increasing concern, as a source of stagnant water that attracts mosquitoes. To report swimming pools or for more information, go to the www. mosquitoes.org or call 1-877-WNV-BIRD (1-877-968-2473). The District recently hired a contractor to fly over the Tri-Valley area to photograph green pools so that these can be inspected and treated for

mosquitoes, but your help is still valuable. LLNL's Landscape and Pest Management staff members actively mitigate mosquito issues and onsite standing water issues, both in larger water bodies (Lake Haussmann, arroyos) and manmade facilities (vaults, storm drains). However, employees may report any onsite standing water with observed mosquito

#### larave or activity at 3-0495.

For more information and resources By visiting the Alameda County Mosquito Abatement District Website. www.mosquitoes.org, residents can go on-line to request mosquitofish, report problems, and ask for inspections of mosquito-breeding sources of standing

water. The State Department of Public Health, West Nile Virus Website also provides information at www.westnile.ca.gov.

## NEWSLINE

Office, Lawrence Livermore National Laboratory (LLNL), for Laboratory employees and retirees. Public Affairs Office: L-797 (Trailer 6527), LLNL, P.O. Box 808, Livermore, CA 94551-0808

Newsline is published weekly by the Public Affairs

**Telephone:** (925) 422-4599; Fax: (925) 422-9291 Web site: http://www.llnl.gov/pao/ Distribution: Mail Services at LLNI

Newsline editor: Don Johnston, 3-4902

Bob Hirschfeld, 2-2379; Linda Lucchetti, 2-5815;

David Schwoegler, 2-6900; Anne M. Stark, 2-9799; Stephen Wampler, 3-3107. **Photographer:** Jacqueline McBride, 2-0175

Designers: Julie Korhummel, 2-9709;

Contributing writers: Nancy Garcia, 2-1099;

Kathleen Smith, 3-4769 For an extended list of Lab beats and contacts, see

http://www.llnl.gov/pao/contact

#### ELECTRONIC EQUIPMENT

Rave Sports Blade inflatable tube for boating. \$30. Inflatable round tow-behind. 925-648-0671

#### 13" Emerson color TV/VCR. \$25. Model 19" monitor. \$50 obo. Only 2 years old. Perfect

Flite tower swim deck, 209-613-2313

Boat motor, \$300.00 obo, 985 Evinrude 8 HP

Duck hunting boat. \$700. 12-feet long, drab green,

with trailer and 18 horse power motor. 209-239-

Fishing boat. \$1,500 obo. Great condition, must

8 NEWSLINE September 21, 2007

## Time to designate beneficiaries for LLNS

#### TRANSITION NEWS

Employees continuing with Lawrence Livermore National Security, LLC (LLNS) may designate beneficiaries for the LLNS pension (TCP1) and life insurance plans by logging into LAPIS (https://lapis. llnl.gov/) and clicking on the Beneficiaries Summary menu selection.

Employees may begin the process starting today at 3 p.m. A user's manual may be obtained at http://www-r.llnl.gov/ahrd/hr/pdfs/beneficiary-users-manual.pdf.

Beneficiary designations will take effect on Oct. 1, 2007 at 12 a.m. and will remain valid unless a new beneficiary designation is submitted. If no beneficiaries are designated, benefits will follow plan defaults. (See the accompanying matrix.)

To designate a beneficiary for the LLNS 401(k) plans (on, or after, Sept. 24) or for the UC Retirement Savings Program plans (403(b), 457(b) and Defined Contribution Plan), call Fidelity Investments at 1-866-682-7787 or visit their

Website (www.netbenefits.com).

If you have a Capital Accumulation Provision (CAP) balance or you elected TCP2 and have previously designated beneficiaries for your UCRP benefits, you may not need to do anything. If you want to update or designate a beneficiary for those plans, visit the At Your Service Online Website (https:// atyourserviceonline.ucop.edu/ayso/).

#### LLNS Plan Defaults at a Glance (if no beneficiaries are designated)

Plan	Description	Default beneficiary	How to Enroll
LLNS Paid Life	Employees eligible for full benefits, coverage is 1 times annual salary up to \$50,000.  For employees eligible for mid-level and core benefits, coverage is \$5,000.	a) surviving spouse or Registered Domestic Partner;     b)surviving child(ren) (defined as natural born, adopted, or children for whom you have legal guardianship) (child or children of a deceased child shall take the share of such child by representation);     c) surviving parents in equal shares;	LAPIS https://lapis.llnl.gov/
Supplemental Life	Employee paid 1, 2, 3 or 4 times annual salary or flat 20K.	d) surviving siblings in equal shares, e) estate.	
Business Travel Insurance	Up to \$100,000 accidental death & dismemberment coverage while traveling on official LLNS business.  Up to \$250,000 coverage for senior managers.	Details will follow at a later date.	
Accidental Death & Dismemberment	Employee paid accidental death & dismemberment coverage, amounts from \$10,000 to \$500,000.		
LLNS TCP1 Single Sum Death Benefit	\$7,500 one-time death benefit	The following categories in which there is a survivor:  a) Spouse of the Member  b) Domestic partner of the Member as identified in a valid registration with the	
401(k)	Voluntary, base, and match (if applicable)	Employer in accordance with its procedures c) Child or children, including adopted child or children, of the Member (child or children of a deceased child shall take the share of such child by representation) d) Parent or parents of the Member e) Sibling or siblings of the Member If there is no such survivor, any death payment shall be paid to the Member's estate.	Fidelity www.fidelity.com/atwork

#### Reminder: biweekly paycheck schedules start

On Sept. 28, biweekly paid employees will receive two paychecks, one for Sept. 9-22 and one for Sept. 23-30 (eight days). Exempt employees will receive one paycheck for Sept. 1-30.

Effective Oct. 1, LLNL will implement a new biweekly payroll schedule for exempt employees (currently monthly paid employees). The change in schedule is a direct result of California Labor Law. As a private entity, Lawrence Livermore National Security, LLC (LLNS) must comply with all state codes and regulations. LLNL's current practice is to pay exempt employees on the first day of the month for their work during the past month. Non-exempt employees at the Laboratory are already on a biweekly payroll schedule.

Exempt status will not be affected by this change. Employees will continue to log their time and report as they do now. But the change will mean that employees are paid differently, receiving a portion of their income earlier than before. This will result in 26 paychecks per year and in this first year of implementation; exempt employees will receive approximately three weeks of income by the end of December 2007 that would have otherwise been paid in January 2008. Since this is unplanned income in the 2007 tax year, employees should plan for tax consequences accordingly.

While this change comes at a time when employees are asked to make a number of other decisions, many of the needed payroll changes will be converted

automatically. Employees will need to evaluate and act on some payroll changes.

Automatic conversions by the Payroll Office

- Existing direct deposits to banks or tax withholding instructions will automatically be converted.
- Additional federal and state tax withholding and direct deposits with flat amounts will be prorated for all employees over 26 pay periods.
- Deductions that are taken out of individual paychecks will be converted automatically into 24 deductions. This includes employee costs for health care, dependent care, pre-tax transportation, LLESA payments, etc. Garnishments for child support also will be prorated over 24 pay periods.

Decisions and actions employees may need to take:

• Employees should review their personal finances for planning and to make independent changes as necessary to ensure the proper timing of automatic bank withdrawals (i.e. mortgage payments, car payments, utilities, etc.). If you have payments taken out of your bank account on the first of the month to pay your bills, you may want to adjust the timing to coincide with the new payroll schedule. Some financial institutions may let you adjust your loans to a biweekly payment, which could save interest.

Payroll representatives are available to meet with employees, and managers also may request briefings for their departments.



Newsline UC-LLNL PO Box 808, L-797 Livermore, CA 94551-0808